

**Request for Proposal (RFP)**  
**for**  
**Need based Maintenance Contract for ABM Mask Aligner System**  
**(Model: ABM/6/500/ NUV/DCCD/ BSV/SA)**

**1. SCOPE OF THE CONTRACT**

- a) The scope of the contract is to render need based maintenance (preventive and breakdown services, calibration, troubleshooting, repairing) and need based spares supply of Mask Aligner System (Model: ABM/6/500/ NUV/DCCD/ BSV/SA) installed in SAC, Ahmedabad.
- b) Vendor shall be responsible for carrying out both preventive maintenance and breakdown services. Maintenance shall only be performed by a trained service engineer. Vendor shall furnish an OEM authorization certificate for sales and support in India, valid throughout the contract period.
- c) Vendor shall not subcontract the services.
- d) **This contract shall be valid for a period of 3 years.**

**2. NEED BASED PREVENTIVE MAINTENANCE**

- a) Vendor shall carry out need based preventive maintenance during the entire contract period of 3 years.
- b) Vendor shall be responsible for the on-site calibration of the complete system including hardware and software during the PM visit.
- c) The list of activities to be carried out during preventive maintenance visit is as per Annexure–III. A visit shall not be considered complete until all activities listed in Annexure-I are completed and satisfactory working of the system is demonstrated as per acceptance criteria S.N. #4.
- d) The actual number of preventive maintenance visits to be conducted, shall be decided by SAC, solely on need basis, during the tenure of the contract.

**3. NEED BASED BREAKDOWN MAINTENANCE**

- a) The contract shall also include need-based breakdown maintenance visits. Need based break down visits shall be carried out whenever required during the contract duration of 3 years.
- b) Any breakdown call shall be attended within 24 working hours, on receipt of intimation (via call or email) from SAC engineer. If the fault cannot be resolved by phone/fax/email guidance, Vendor shall depute factory trained service engineer, to SAC, within 4 days.
- c) A breakdown visit shall be considered to be complete only after the system is restored to its satisfactory working condition. If system is not made operational during a particular breakdown visit (for any reason) and if vendor is required to make extra visit/s to resolve the breakdown event, such extra visits would be considered as continuation of the first visit.
- d) Vendor will be responsible for fault diagnosis and repairing or replacement of the faulty parts for the smooth operation of the system.
- e) Vendor will be fully responsible for on-site Calibration (after parts replacements, if required) of complete system including hardware and software.

- f) The provision of replacement of all the spare parts (need based) and accessories will be the responsibility of vendor, based on the Preventive maintenance/breakdown diagnosis.
- g) If during breakdown maintenance visit, any other fault is developed, then it would be responsibility of vendor to rectify the developed fault as well.
- h) After each preventive/ breakdown maintenance visit, vendor shall prepare a detailed service report clearly indicating the type of problem, work carried out, and system performance afterwards.
- i) The actual number of breakdown maintenance visits to be conducted, shall be decided by SAC, solely on need basis, during the tenure of the contract.

#### **4. Acceptance Criteria**

- a) Vendor to note down beam intensity before and after the preventive/breakdown maintenance activity at 5 points on 4" wafer. The same is required to be mentioned in the service report.
- b) In case beam intensity measurement is not possible before starting the maintenance activity, the same with reason has to be clearly mentioned in the service report.
- c) A maintenance visit (Preventive/Breakdown) shall be considered complete only when vendor demonstrate following:
  - Beam intensity uniformity within  $\pm 5\%$  at 365nm (i-line) over 4" dia. wafer.

#### **5. NEED BASED SPARES**

- a) During preventive maintenance /breakdown maintenance if any parts are required to be replaced, it would be supplied by SAC if in stock with SAC.
- b) Any required spare which are not available with SAC, but is listed in the PO, request for the supply of same shall be sent to vendor by SAC Purchase. SAC shall pay for these need-based spares as per annexure-III rate list (to be supplied along with the bid, which shall be valid for the entire period of the AMC) and separate bill shall be raised against the supply of these need-based spares.
- c) In case of any spares/ consumables requirement, which are not a part of the rate list (annexure-III), SAC reserves the right to accept (upon the recommendation of the vendor), and will consider the quote/ prices for the said unlisted essential spares/consumables as and when it is required, for making the equipment operational, and payment of the same will be processed through the same channel as for the items listed under annexure-III.
- d) Delivery period: 8 weeks from date of intimation by SAC (ex-works).

#### **6. PRICES OF THE CONTRACT**

- a) Maintenance/breakdown visit charges under this contract shall be quoted on "**per visit**" basis and vendor shall provide these costs in Annexure-1.

- b) A penalty of 0.2% (not exceeding 3%) of total amount of service charge for that particular call/visit (excluding all the taxes) for delayed response time beyond 24 hours, for every delayed day, shall be deducted.

## **7. PAYMENT FOR SERVICES AND NEED BASED SPARES**

- a) **For Services:** Payment against services will be made after satisfactory completion of each service visit and satisfactory demonstration of system performance. The bill in duplicate duly certified by the SAC focal person and approved by Head of Division along with service report to the effect that the system is serviced satisfactorily and performance demonstrated, shall be submitted to Accounts Officer, SAC for releasing payment.
- b) **For Spares:** Payment shall be made within 30 days of receipt of spare(s) on the basis of certificate from SAC focal person with due approvals.

## **8. MONITORING OF CONTRACT**

- a) SAC reserves the right to review and verify the progress of work at any time during the machine maintenance work and adherence by Vendor to the standards and procedures specified.

## **9. TERMINATION OF CONTRACT**

- a) SAC reserves the right to terminate the contract if the performance/services of vendor is not found satisfactory during the period of the contract, by giving one-month notice without any financial implications on either side.

## **10. CONTACT PERSON**

- a) SAC and vendor both will define focal person on successful establishment of AMC contract for all technical matters relating to this AMC.

## **11. GENERAL TERMS AND CONDITIONS**

- a) Personnel of Vendor will not be allowed to enter into any building or laboratory in SAC other than those specified.
- b) Vendor shall be responsible for the verification of credentials of the individuals deputed on job under the contract from security point of view.
- c) Utmost care shall be taken by the service person(s) while carrying out the job and ensure the safety of SAC property.
- d) In the event of the damages to SAC property or personal injury to our/your personnel due to the negligence of the service representative, the responsibility will solely rest with Vendor.

## **12. INTELLECTUAL PROPERTY RIGHTS & CONFIDENTIALITY**

- a) Vendor shall not use technical information, reports and other related documents given by SAC during the course of the work for any purpose other than for carrying out the work under contract to be finalized under this RFP.

### **13. COVERAGE/RISK OF THE DEPLOYED MANPOWER**

- a) Vendor shall be fully responsible for the safety of its service personnel deployed at SAC. Vendor will be solely responsible in case of any accident, which leads to minor or major physical injury and loss of life of its personnel during the time of execution of contract at SAC premises due to natural calamities/accident explosion etc. if any.
- b) SAC shall not be responsible for any kind of accident to the persons deployed by Vendor and no provision shall be made to provide any financial assistance/any kind of compensation or cost incurred in connection with such incidence.

### **14. SECURITY**

- a) Personnel of Vendor deployed at SAC, shall produce valid Identity related documents, as required from time to time. Vendor shall be ready for any other formalities, which may be required by competent authority of SAC at the time of finalization of contract.

### **15. ARBITRATION**

- a) Dispute, if any, shall be settled mutually, failing which it shall be referred to a one-man Arbitrator appointed by the Director, SAC, Ahmedabad in accordance with Arbitration Act 1996, whose decision shall be final and binding on both the parties.

### **16. OTHER REQUIREMENTS**

- a) Maintenance/service engineer shall come along with all the necessary tools and instruments in order to eliminate undue delay during the course of maintenance work.
- b) Vendor shall arrange relevant electrical diagram, electronics circuit diagram & mechanical diagram required for maintenance/trouble-shooting.
- c) Vendor shall put its best efforts to ensure maximum up time of the system.
- d) The personnel from Vendor shall follow all safety and security measures followed in SAC/ISRO.

### **17. COMPLIANCE STATEMENT**

- a) Vendor shall provide point-by-point compliance to all requirements mentioned above, in their bid.

**Annexure-I**

<b>S.N.</b>	<b>Activities under Preventive Maintenance Visit</b>
1.	<b>Alignment System</b> Check the Alignment system and lubricate X, Y, Z linear rails with TRI-FLOW (with Teflon) or light machine oil.
2.	<b>Alignment Tooling</b> Check Z axis up/down motion. Check Vacuum chuck motion, if it is not smooth then do proper lubrication of SS shaft below the chuck.
3.	<b>Light Source</b> Check light source intensity using intensity meter and replace it with newer one, if required. Do required calibration. Check heat sink and/or anode wire and clean them.
4.	<b>Mirrors</b> Clean with methanol/IPA and then dry it with filtered air/nitrogen.
5.	<b>Metal Reflectors</b> Clean the metal reflectors with methanol/IPA.
6.	<b>Power Supply</b> Check power supply and do calibration, if required
7.	<b>Alignment Optics</b> Clean microscope objectives, eyepieces, CCD assembly, Zoom lenses etc. as require.
8.	<b>Utilities Check</b> Check utilities like vacuum pump etc.

## Annexure-II

### List of Need-based Spares

S.N.	Part Description	Unit Price
1.	6" Aluminum Parabolic Reflector (with mount)	
2.	First Mirror Mount/Heat Sink (complete assembly w/o mirror)	
3.	Fly's Eye Lens (complete assembly w/o shutter motor)	
4.	4.5" x 6.0" NUV Quartz Dielectric Mirror	
5.	Shutter Motor	
6.	Ni-coated Anode Wire for 500W NUV Lamp	
7.	Heat Sink for 500W NUV Lamp	
8.	ABM 500W NUV Lamp	
9.	1" Square Planarizing Vacuum Chuck	
10.	1" Square Chuck Contact Vacuum Seal	
11.	2" Square Planarizing Vacuum Chuck	
12.	2" Square Chuck Contact Vacuum Seal	
13.	4" Square Planarizing Vacuum Chuck	
14.	4" Square Chuck Contact Vacuum Seal	
15.	6" Square Planarizing Vacuum Chuck	
16.	6" Square Chuck Contact Vacuum Seal	
17.	Mask Holder Screws	
18.	6" NUV Light Shield	
19.	Flow Control Valve (MFC 2)	
20.	Interlock Valve (Mask Frame – 3 port)	
21.	Interlock Valve (Aligner Console – 2 port)	
22.	Auto-planarization Valve	
23.	Post Lock Vacuum Seals (Set of 2)	
24.	24 V Switch Indicator Lamp	
25.	Pre-alignment Pins	
26.	Two-Channel Intensity Meter with 365/405 nm Probe Head	
27.	Oil-free Vacuum Pump	
28.	PLC for Model ABM/6/500/NUV/DCCD/BSV/SA	
29.	Frontside Illuminator Controllers (excluding fibers) (Set of 2)	
30.	Backside Illuminator Controllers (excluding fibers) (Set of 2)	
31.	17 inches High-resolution LCD Display (Set of 2)	
32.	Image Grabbing Unit (complete set)	
33.	Video Memory Mixer	
34.	Cable/Connector set for display and illumination controller	